

APPELLANT'S BRIEF UNDER 37 CFR § 41.37	Docket No. C016-7080US5
Applicant: Raymond Giannelli Serial No: 10/806,833 Filed: March 22, 2004 For: Cross Trainer Exercise Apparatus Examiner: Tam M. Nguyen Art Unit: 3764 Conf. No.: 4229	

Assistant Commissioner for Patents
Board of Patent Appeals and Interferences
P.O. Box 1450
Alexandria, VA 22313-1450

This brief is submitted further to a Final Office Action, dated April 15, 2010, and a Notice of Appeal, dated July 15, 2010.

This brief contains these items under the following headings, and in the order set forth below (37 C.F.R. 41.37(c)(1)):

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I. Real Party In Interest

The real party in interest in this appeal is Cybex International Inc.

II. Related Appeals and Interferences

There are currently no other appeals, interferences, or judicial proceedings known to Appellant or Appellant's legal representatives or assignee that may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

III. Status Of Claims

Claims 10-21, 23, and 36 are currently pending in this application. Claims 1-9, 22, and 24-35 are cancelled. Claims 10, 20, and 36 were previously presented.

Claims 10-21, 23, and 36 have been finally rejected by the Patent Office. Accordingly, claims 10-21, 23, and 36 are the appealed claims.

IV. Status Of Amendments

All amendments have been entered. No amendments under 37 C.F.R. § 1.116 have been filed.

V. Summary Of Claimed Subject Matter

Disclosed in the present application is an apparatus for simulating a back and forth leg or foot movement. Prior art exercise machines, such as elliptical machines, were designed for an elliptical or arcuate path. (*Id.* at ¶ [03].) However, these paths were not adjustable other than changing the shape of the ellipse, with the result that the foot travels along a different path from back to front than from front to back. (*Id.*) Moreover, the prior machines did not incorporate upper body exercise or a handle or hand grip interconnected to a foot pedal which together move/pivot simultaneously in the same back or forth direction.

Disclosed herein is an apparatus for enabling a user to perform a simulated walking, running, or other back and forth leg movement exercise. (Specification at ¶ [02].) In one embodiment, the apparatus includes a frame 10 having a front region 12, rear region 14 having “legs” 16a, 16b, 16c and 16d, and upper supports 18a, 18b, 18c, and 18d. (*Id.* at ¶ [71], FIG. 1.) Upper supports 18c and 18d comprise the upper links of a pair of four bar linkages and part of the arcuate portion of the frame, terminate in legs 16c and 16b respectively. (*Id.*) Hand grips 22a and 22b are secured to the upper supports 18a and 18b. (*Id.*) Foot supports 24a and 24b are movably connected to, and supported by, forward linkages or legs 26a and 26b, and rear linkages 26c and 26d. (*Id.* at ¶ [72].)

In one embodiment, the forward linkages 26a and 26b in turn are movably connected to drive linkages 28a and 28b, which are connected to other elements concealed by housing 30. (*Id.* at ¶ [74] and FIGs. 3 and 4.) Crankshaft 32 projects from each side of housing 30 and is connected to each of the drive linkages 28a and 28b via crank arms 40a and 40b. Handles 22a and 22b allow the user to steady themselves while the user's legs move in an arcuate path of motion. (*Id.* at ¶ [77] and FIG. 4). Top bearings 36a and 36b receiving the crankshaft 32 are secured to a mounting 38. (*Id.* at ¶ [80].)

In one embodiment, a user's feet will traverse as the foot supports move fore and aft while suspended from the forward and rear linkages. (*Id.* at ¶ [83].) Because the foot supports 24a and 24b are pivotally connected to, and swing with, the forward linkages 26a, 26b and rear linkages 26c, 26d, the foot supports travel a curved or arcuate path, and not an elliptical path. (*Id.*) The range of motion is defined by the length of the crank arms 40a and 40b (FIG. 4), which provide an appropriate stride length. (*Id.*)

In one embodiment, the motion path for the foot supports 24a and 24b can be altered by adjusting the position of mounting 38. (*Id.* at ¶ [84].) Pivoting the mounting 38 forward moves the components secured directly or indirectly thereto forward, whereas pivoting the mounting 38 rearward causes the components secured directly or indirectly thereto to move rearward. (*Id.*) This repositioning causes the motion path of

the foot supports 24a and 24b to move to a different location along an arcuate path around a point of rotation "p", shown here between pivot assemblies 31b and 31c, at a distance established by the length of the forward and rear linkages or legs 26a, 26b, 26c and 26d. (*Id.*) Thus, the specific location on the arc or arc segment ("the motion path") is user selectable to increase or decrease stride angle and location from a number of user selectable points, or arc segments, defined around the point of rotation.

In one embodiment, the overall arcuate path of travel J that the pedals 24 a, b may travel in remains the same. (*Id.* at ¶ [87]; Fig. 7.) Pivoting the support arm 38 to different pivot positions only changes the arc "segment" (e.g. segment AP of Fig. 7; segment AP' of Fig. 8; or segment AP" of Fig. 10) through which the pedals may travel from rearwardmost to forwardmost positions but does not change the overall path of arcuate travel J. The overall arcuate path of travel J is defined by the machine or apparatus itself, i.e. by the mounting, positioning, lengths and widths of the links 18c, d, 24a, b and 26a-d. The user may select a segment of the overall machine defined arcuate path of foot pedal travel J depending on the degree of pivoting of arm 38 that the user selects for any given exercise session.

In one embodiment, as shown in Fig. 10, when the right pedal 24a moves forwardly the right handle 106a and arm 100a pivot or move forwardly; when the right pedal 24a moves backwardly the right handle 106a and arm 100a pivot or move rearwardly; when the left pedal 24b moves forwardly the handle 106b and arm 100b pivot or move forwardly; when the left pedal 24b moves rearwardly the handle 106b and arm 100b pivot or move rearwardly.

Independent **claim 10** describes one embodiment directed to an apparatus for simulating a back and forth leg or foot movement, comprising:

- a pair of left and right foot pedals (24a, 24b) each having a horizontally oriented foot sole receiving surface for a user standing thereon vertically upright,
- the foot pedals (24a, 24b) being mounted on a frame (10) for movement in a back and forth direction along an arcuate path (AP) between

forwardmost (24b'') upward horizontal and rearwardmost (24b') downward horizontal positions;

- a pair of left and right manually graspable input arms (22a, 22b) each pivotably interconnected to a respective one of the left and right foot pedals (24a, 24b) such that the left arm pivots forwardly together with forward and upward movement of the left pedal, the left arm pivots rearwardly together with backward and downward movement of the left pedal, the right arm pivots forwardly together with forward and upward movement of the right pedal and the right arm pivots rearwardly together with backward and downward movement of the right pedal.

Independent **claim 20** is directed to an apparatus for simulating a back and forth leg or foot movement of a user, comprising:

- a pair of left and right foot pedals (24a, 24b) each having a horizontally oriented foot sole receiving surface, the foot pedals being mounted and arranged on a frame (10) by linkages (26a-26d) for supporting the user vertically upright and for movement in a back and forth direction along an overall arcuate path (J) defined by the linkages;
- a pair of left and right manually graspable input arms (22a, 22b) each pivotably interconnected to a respective one of the left and right foot pedals (24a, 24b) for pivoting movement in the back or forth direction;
- wherein the foot pedals are adjustable to move along a selected segment (AP, AP', AP'') of the overall arcuate path (J) between forwardmost upward (24b'') horizontal and backwardmost downward (24b') horizontal positions, the selected segment (AP, AP', AP'') of the overall arcuate path (J) being variably selectable by the user to have a variable degree of incline;
- wherein the left arm pivots forwardly together with forward movement of the left pedal, the left arm pivots rearwardly together with backward movement of the left pedal, the right arm pivots forwardly together with

forward movement of the right pedal and the right arm pivots rearwardly together with backward movement of the right pedal.

Independent **claim 36** is directed to an apparatus for simulating a back and forth leg or foot movement of a user, comprising:

- a pair of left and right foot pedals (24a, 24b) each having a horizontally oriented foot sole receiving surface,
- the foot pedals being mounted and arranged on a frame (10) for supporting the user standing thereon vertically upright and for movement in a back and forth direction along any one of a plurality of reproducible user selectable segments (AP, AP', AP'') of an arcuate path (J) between forwardmost upright (24b'') horizontal and rearwardmost downward (24b') horizontal positions;
- a pair of left and right handles (22a, 22b) for being grasped by a user's hands each pivotably interconnected to a respective one of the left and right foot pedals (24a, 24b) such the left handle pivots forwardly together with forward movement of the left pedal, the left handle pivots backwardly together with backward movement of the left pedal, the right handle pivots forwardly together with forward movement of the right pedal and the right handle pivots backwardly together with backward movement of the right pedal.

VI. Grounds Of Rejection And Issues On Appeal

The issue presented for appeal is:

Whether claims 10-21, 23, and 36 have been properly rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 326,247 ("Root").

VII. Arguments

Appellant respectfully submits that claims 10-21, 23, and 36 are not properly rejected under 35 U.S.C. § 102(b) as being unpatentable over Root.

An anticipation analysis is a two-step process involving (1) interpreting the claims, and (2) determining whether each claim limitation is met by the prior art. *TI Group Auto. Sys. (N. Am.), Inc. v. VDO N. Am., L.L.C.*, 375 F.3d 1126, 1139 (Fed. Cir. 2004). To establish anticipation in the second step, a single prior art reference must disclose “all elements of a claimed invention arranged as in that claim.” *Praxair, Inc. v. ATMI, Inc.*, 543 F.3d 1306, 1327 (Fed. Cir. 2008). That reference “must describe the claimed invention with sufficient precision and detail to establish that the subject matter existed in the prior art.” *Verve, LLC v. Crane Cams, Inc.*, 311 F.3d 1116, 1120 (Fed. Cir. 2002). Appellant respectfully submits that the rejection outlined in the Final Office Action dated April 15, 2010 (“Final Office Action”) is not sufficient to render the claimed invention anticipated for at least the following reasons:

- Root does not disclose a horizontally oriented foot sole receiving surface;
- If the Examiner’s interpretation of “horizontally oriented foot sole receiving surface,” were deemed reasonable, it would result in Root’s apparatus being incapable of meeting other limitations of the claimed invention
- Root does not teach user selectable segments of an overall arcuate path; and
- Root does not disclose a foot pedals that traverse an overall arcuate path between forwardmost upward horizontal and backwardmost downward horizontal positions.

Appellant submits these arguments in detail below.

1. Root does not disclose a horizontally oriented foot sole receiving surface for a user standing thereon vertically upright

Appellant respectfully submits that the rejection of anticipation in view of Root is based in part on an unreasonable broad interpretation of the limitation “a horizontally oriented foot sole receiving surface for a user standing thereon vertically upright” to encompass a foot pedal “that can be oriented horizontally.” A reasonable reading of Root would reveal that the foot pedals were designed for vertical disposition and if oriented horizontally, could not support a user standing thereon vertically upright.

The Examiner alleges that Root describes “a pair of left and right foot pedals (L) each having a horizontally oriented foot sole receiving surface for standing thereon.” (Final Office Action at p. 2.) The Examiner further reasons that because the foot pedals (L) are pivotally connected to levers (G) at pivot (M), the foot pedals have a sole receiving surface “that can be oriented horizontally for supporting a user to stand vertically upright.” (*Id.* at p. 4.) The Examiner believes it is proper to construe the limitation “a horizontally oriented foot sole receiving surface for a user standing thereon vertically upright” to encompass Root’s foot pedal for the reason that it can be oriented horizontally. (*Id.* at p. 4.) Moreover, this interpretation requires ignoring the limitation “for a user standing thereon vertically upright,” which the Examiner asserts to be an “intended use of the device.” (*Id.*)

Appellant respectfully submits that Root does not describe the claimed invention because the Examiner’s interpretation of “horizontally oriented” foot sole is in error and wholly unreasonable. While the Patent Office is instructed to give the claims a broad construction, the Federal Circuit has recently reminded the Office that the interpretation must be “reasonable.” *In re Suitco Surface, Inc.*, 603 F.3d 1255, 1259 (Fed. Cir. 2010). In *Suitco Surface*, the claims were directed to a floor having a “material for finishing the top surface of the floor.” *Id.* at 1256 (emphasis added). The Board of Patent Appeals and Interferences (BPAI) affirmed the examiner’s rejection and claim construction, which effectively ignored the limitation “material for finishing,” and instead merely required “any layer above the floor, whether it was the top or final layer.” *Id.* at 1259.

In vacating and remanding the BPAI, the Federal Circuit gave patentable weight to the entire limitation at issue, noting that a material cannot finish a surface unless it is the final layer. *Id.* According to the Federal Circuit, the Patent Office's construction was unreasonable in ignoring all of the express claim language:

The PTO's proffered construction ignores this reality by allowing the finishing material to fall anywhere above the surface being finished regardless of whether it actually "finishes" the surface ... This construction does not reasonably reflect the plain language and disclosure.

Id. at 1260. The Federal Circuit emphasized that the Patent Office should have also interpreted the claims in light of the specification, which would have required the claimed material to be the final treatment or coating of a floor surface, and not any intermediate layer. *Id.* at 1260-1261.

Here, the Examiner's error is similar to that of *Suitco Surface* in that "for a user standing thereon vertically upright" was not granted patentable weight. Indeed, the unreasonableness of this construction is such that it permits the Examiner to reject the claim in light of a prior art apparatus where the user is lying down.

One skilled in the art would have readily understood "foot pedals having a horizontally oriented foot sole receiving surface for a user standing thereon vertically upright" as a surface oriented parallel to the sole of a user's foot, which is parallel to the ground. For a user to stand vertically upright on such a surface, the user must necessarily be oriented perpendicular to the horizontally oriented surface (and thus, perpendicular to the ground). This limitation further imparts structural meaning of a horizontally oriented foot pedal that is capable of supporting the weight of a user standing vertically upright. This interpretation is clearly shown in each embodiment of the specification and in each of FIGs. 1-10.

The Examiner, however, alleges that the sole receiving surface must merely be one that "can be oriented horizontally for supporting a user to stand vertically upright ... [noting] there is nothing in the drawings that would preclude the foot pedals from being rotated to a horizontal orientation." (Office Action at p. 4.) To that end, the Examiner asserts that Root meets this limitation because foot pedals (L) of Root are pivotally

connected to levers (G) at pivot (M), allegedly allowing the foot pedals of Root to pivot about (M) and achieve a horizontal orientation. The Examiner's reading of Root is schematically shown in FIG. A below, in which dashed line AA indicates the direction of the horizontal orientation of Root's foot plates (L) after pivoting about point (M).

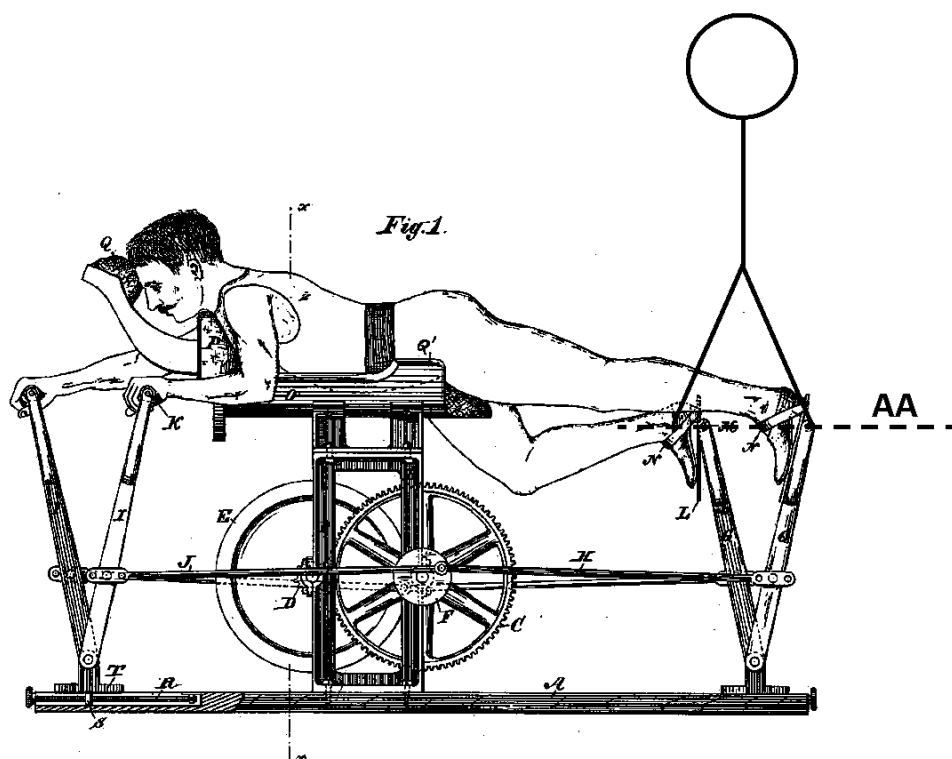


FIG. A

Appellant respectfully submits that there is no disclosure or teaching for such horizontal orientation of foot pedals (L) in Root. Root is directed to an apparatus that allows “passive exercise” where the user is in a “horizontal” or “comparatively passive” position. (Root at p. 1, lines 9-11 and 14-16.) Root further teaches that the apparatus leaves the “legs free.” (*Id.* at p. 1, lines 16-17.) Because of the user’s overall horizontal orientation, the foot levers “hang on pivots M” to be aligned with the sole of a user’s foot. (*Id.* at p. 1, lines 46-47.) To exercise, a person lies in saddle or body-support O, which has breast support P, forehead support Q, and hip supports Q’ “for the body to rest upon, and ... relieve the abdomen of a person exercising from the weight of the body.” (*Id.* at lines 50-58 and 71-72.)

Whether or not Root's foot levers can achieve a horizontal orientation, it is clear that Root intended the foot levers to "hang," i.e., achieve a vertical position with respect to the ground. It is also clear that Root intended for the user to lie down on the apparatus by, providing a saddle and other body weight support components. There is no provision in the apparatus of Root to allow a person to stand upright. It is not understood how the Examiner could easily ignore the limitations "horizontally oriented" and "user standing thereon" and "vertically upright" upright when they clearly distinguish over an apparatus such as Root that is designed for anything but a vertically upright user.

Even if the Examiner were correct in asserting that the claims could encompass Root's apparatus by pivoting pedals (L) substantially around (M) to achieve horizontal orientation horizontally, the apparatus could not support the user for standing thereon vertically upright. As indicated by the stick figure of a user "standing thereon vertically upright" inserted in FIG. A, users would have to precariously balance their body weight about pivot points (M) to maintain a horizontal orientation of the pedals. However, such instability is far afield of the purpose of Root to allow exercise in a "comparatively passive position."

Alternatively, to meet the claim limitation, the pedals can be arranged in a horizontal position by rotating the entire Root apparatus by 90 degrees, as shown below in FIG. B:

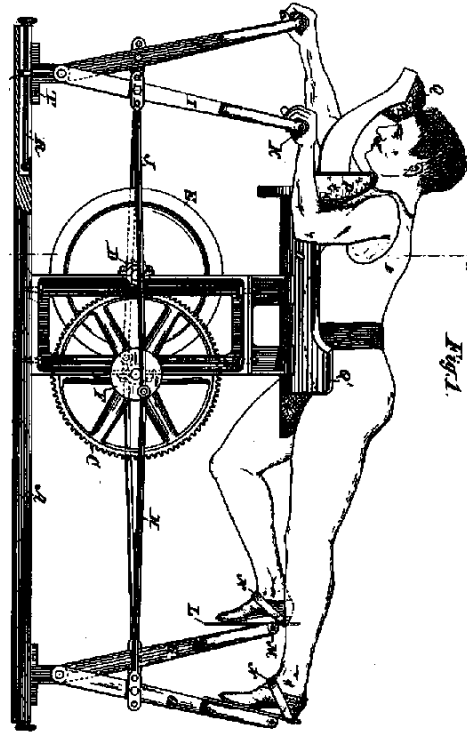


FIG. B

One skilled in the art would not view the arrangement of FIG. B as allowing a user to stand vertically upright on the foot pedals. There is no disclosure in root for a mechanism that would support the entire apparatus in this position. Moreover, Root, teaches directly away from this orientation as the objective is to allow a user to exercise horizontally and “in a comparatively passive position.” This orientation would also require that the linkages be designed to support the full weight of the user. This is not taught by Root. Instead, Root’s apparatus is designed to support the user’s body weight primarily through saddle O, alternatively termed a “body-support,” that “conforms to the general shape of a person’s body, with a breast support P and a forehead support Q. (Root at lines 50-54.) There is no indication, however, that the linkages alone would be capable of supporting a user’s entire weight, which would be necessary if the orientation of FIG. B was in use.

Finally, the artificial manipulation of Root to meet an unreasonable claim construction would render Root inoperable for its intended purpose, which is improper. *In re Gordon*, 733 F.2d 900, 902 (Fed. Cir. 1984). It is explicitly clear to one skilled in the art that Root’s apparatus was designed for passive exercise with the user in a

horizontal position. Any alteration of Root that would force the user to stand vertically (in an attempt to meet the claimed invention), and place Root's apparatus outside its intended purpose. This resulting inoperability of the Root apparatus based on the Examiner's claim construction further evidences its inherent unreasonableness.

Appellant respectfully submits that the claim construction provided by the Examiner, i.e., one that encompasses the Root apparatus, is unreasonable and is a basis for error in this rejection.

2. If the Examiner's interpretation of "horizontally oriented foot sole receiving surface," were deemed reasonable, it would result in Root's apparatus being incapable of meeting other limitations of the claimed invention

Appellant respectfully submits that even if the Board were to accept the Examiner's interpretation of "a horizontally oriented foot sole receiving surface for a user standing thereon vertically upright," the rejection would remain in error because Root would not meet other claim limitations present in each independent claim, such as a pair of left and right manually graspable input arms or a pair of left and right handles for being grasped by a user's hands, or input arms that pivot in a back and forth direction.

"Proper claim construction ... demands interpretation of the entire claim in context, not a single element in isolation." *Hockerson-Halberstadt, Inc. v. Converse Inc.*, 183 F.3d 1369, 1374 (Fed. Cir. 1999); *see also Wilson Sporting Goods Co. v. Hillerich & Bradsby Co.*, 442 F.3d 1322, 1328 (Fed. Cir. 2006) ("Taking into account the term "annular," "gap" takes on a meaning different from the trial court's construction."). The Examiner has erred in interpreting "a horizontally oriented foot sole receiving surface" in isolation without considering the relationship between this limitation and other claim terms, such as input arms or a pair of left and right handles for being grasped by a user's hands.

Assuming that the Examiner is reasonable in interpreting "horizontally oriented foot sole receiving surface" to cover Root's apparatus by pivoting pedals (L) substantially around (M) to achieve horizontal orientation, it is unclear how one can read Root to meet the limitation "manually graspable input arms." If the user is standing

upright on pedals that are pivoted around (M) to achieve horizontal orientation, as shown in the stick figure of FIG. A above, the user could not possibly reach the handles K of Root, rendering Root's handles incapable of being "manually graspable" or "for being grasped."

In an alternative possibility where the entire Root apparatus is rotated 90 degrees to position the foot pedals horizontally, as shown in FIG. B, the handles would not move forwardly and backwardly, as called for by the each of the claims, but would result instead an up and down motion.

Appellants cannot contrive from Root a possibility of positioning the foot pedals in a horizontal position while allowing a user to control the handles in a back and forth movement, nor has the Examiner provided an explanation of how Root can operate in this manner. For at least these additional reasons, Appellant respectfully submits that the rejection is in error.

3. Root does not teach user selectable segments of an overall arcuate path

The Examiner is silent on precisely where Root discloses a "selected segment of the overall arcuate path being variably selectable by the user to have a variable degree of incline" as recited in independent claim 20, or a "plurality of reproducible user selectable segments of an arcuate path between forwardmost upright horizontal and rearwardmost downward horizontal positions" as recited in independent claim 36. Appellant respectfully submits that Root discloses only one segment that is fixed and cannot be altered by the user.

The meaning of these limitations are provided in the specification, e.g., at ¶¶ [84] and [87]. A motion path for the foot supports 24a and 24b can be altered by adjusting the position of mounting 38. Pivoting the mounting 38 forward moves the connected components correspondingly forward, causing foot supports 24a and 24b to move to a different location. The specific location on the arc or arc segment ("the motion path") is user selectable to increase or decrease stride angle and location from a number of user selectable points, or arc segments, defined around the point of rotation "p" (see FIG.

5A). FIG. 7 shows an overall arcuate path of travel J for foot supports 24a and 24b. The user may select a segment of the overall machine defined arcuate path of foot pedal travel J depending on the degree of pivoting of mounting 38 that the user selects for any given exercise session. Each segment selected will have a different degree of incline, e.g. H1 for segment AP and H2 for segment AP'.

There is no corresponding mechanism in Root for user selectable segments. Root only describes one arcuate path for foot pedals (L). While Root describes “[o]ther combinations of foot and arm movements ... by changing the adjustment of the rods connecting the hand and foot levers to the balance-wheel, or by changing the position of the levers upon the base, or the position of the crank-pins” etc., Root provides no specific guidance on how one skilled in the art could adjust these mechanisms to allow a user to define segments of an overall arcuate path. The concept of an overall arcuate path, and the ability to change segments within this path is simply not described in Root.

For at least these additional reasons, Appellant respectfully submits that the rejection is in error.

4. Root does not disclose a foot pedals that traverse an overall arcuate path between forwardmost upward horizontal and backwardmost downward horizontal positions

The Examiner alleges that Root discloses foot pedals that can move between a forwardmost upward horizontal position, i.e., at an apex of full path of travel of the pedals, and a rearwardmost downward horizontal position, at the rearwardmost position. Appellant respectfully disagrees and submits that this interpretation does comport with the clear meaning of the claim language.

The term “forwardmost upward horizontal position” describes a specific arcuate path as exemplified in FIG. 7. Foot pedal 24b has a rearwardmost downward horizontal position at 24b' and forwardmost upward horizontal position at 24b". It can be seen that position 24b" is both forwardmost and upward, and position 24b' is both rearwardmost and downward, defining an overall arcuate path that has an upwardly incline. (Specification at ¶ [88].) In contrast, Root does not have a position that is both forwardmost and upward. The “apex” referred to by the Examiner may be upward, but it

is not the forwardmost position. Instead, the forwardmost position in the path of Root is also the downward position. Root's foot pedals cannot achieve a forwardmost upward position because its overall path does is not inclined; rather, it is symmetrical about the vertical and in which both the forwardmost and rearwardmost positions are downward. Accordingly, Root does not describe an overall arcuate path with a forwardmost upward horizontal position.

Appellant respectfully submit that Root fails to disclose each and every limitation to support the Examiner's anticipation rejection. Further, Appellants submit that Root does not render obvious the claimed invention based on a clear reading of Root and a reasonable claim construction. Appellants requests that the Board reverse and withdraw this rejection.

Conclusion

For the reasons given above, it is respectfully requested that the rejection of claims 10-21, 23, and 36 of the present application be reversed and that the present application be allowed for issuance.

To the extent any extension of time under 37 C.F.R. § 1.136 is required to obtain entry of this Appeal Brief, such extension is hereby respectfully requested. If there are any fees due under 37 C.F.R. §§ 1.16 or 1.17 which are not enclosed herewith, including any fees required for an extension of time under 37 C.F.R. § 1.136, please charge such fees to our Deposit Account No. 02-3038.

Respectfully submitted,

/Maria T. Bautista/

Date: 2010-09-15

Maria T. Bautista, Reg. No. 52,516
RISSMAN HENDRICKS & OLIVERIO, LLP
Customer Number 021127
Tel: (617) 367-4600 Fax: (617) 367-4656

VIII. CLAIMS APPENDIX

1 – 9. (Cancelled)

10. **(Previously Presented)** An apparatus for simulating a back and forth leg or foot movement comprising:

a pair of left and right foot pedals each having a horizontally oriented foot sole receiving surface for a user standing thereon vertically upright,

the foot pedals being mounted on a frame for movement in a back and forth direction along an arcuate path between forwardmost upward horizontal and rearwardmost downward horizontal positions;

a pair of left and right manually graspable input arms each pivotably interconnected to a respective one of the left and right foot pedals such that the left arm pivots forwardly together with forward and upward movement of the left pedal, the left arm pivots rearwardly together with backward and downward movement of the left pedal, the right arm pivots forwardly together with forward and upward movement of the right pedal and the right arm pivots rearwardly together with backward and downward movement of the right pedal.

11. **(Original)** The apparatus of claim 10 wherein the foot pedals are adjustable to move in an arcuate path of selected incline.

12. **(Original)** The apparatus of claim 10 wherein the input arms are adjustable to move in a pivot path of selected degree of pivot.

13. **(Original)** The apparatus of claim 10 wherein the pedals and the input arms are interconnected to a pivot mechanism adjustable to a selected degree of pivot that adjusts the arcuate path of the foot pedals and the degree of pivot of the input arms.

14. **(Original)** The apparatus of claim 10 wherein the arms and the pedals are interconnected to a reciprocating mechanism that directs one of the left or right pedals to travel in the back or forth direction while simultaneously directing the other of the left or right pedals to travel in an opposite direction.

15. **(Original)** The apparatus of claim 10 wherein the arms and the pedals are interconnected to a reciprocating mechanism that directs one of the left or right pedals to travel in the back or forth direction while simultaneously directing the other of the left or right pedals to substantially always travel in an opposite direction.
16. **(Original)** The apparatus of claim 14 wherein the reciprocating mechanism comprises a rotating mechanism having a pair of pivot points, one pivot point pivotably interconnected to one of the left or right pedals and arms and the other pivot point pivotably interconnected to the other of the left or right pedals and arms.
17. **(Original)** The apparatus of claim 14 wherein the pivot points are disposed at substantially opposing 180 degree positions along a circular path of rotation, the pedals and the arms being interconnected to a respective pivot point by a link mechanism.
18. **(Original)** The apparatus of claim 10 wherein the foot pedals pivot or rotate less than about three degrees during movement between the forwardmost and backwardmost positions.
19. **(Original)** The apparatus of claim 10 wherein each of the foot pedals are mounted on the frame via a four bar linkage mechanism.
20. **(Previously Presented)** An apparatus for simulating a back and forth leg or foot movement of a user comprising:

a pair of left and right foot pedals each having a horizontally oriented foot sole receiving surface, the foot pedals being mounted and arranged on a frame by linkages for supporting the user vertically upright and for movement in a back and forth direction along an overall arcuate path defined by the linkages;

a pair of left and right manually graspable input arms each pivotably interconnected to a respective one of the left and right foot pedals for pivoting movement in the back or forth direction;

wherein the foot pedals are adjustable to move along a selected segment of the overall arcuate path between forwardmost upward horizontal and backwardmost downward horizontal positions, the selected segment of the overall arcuate path being variably selectable by the user to have a variable degree of incline;

wherein the left arm pivots forwardly together with forward movement of the left pedal, the left arm pivots rearwardly together with backward movement of the left pedal, the right arm pivots forwardly together with forward movement of the right pedal and the right arm pivots rearwardly together with backward movement of the right pedal.

21. **(Original)** The apparatus of claim 20 wherein the foot sole receiving surfaces pivot or rotate less than about three degrees between the forwardmost and backwardmost positions.
22. **(Cancelled).**
23. **(Original)** The apparatus of claim 20 wherein the linkages comprise a four bar linkage mechanism.
- 24-35. **(Cancelled).**
36. **(Previously Presented)** An apparatus for simulating a back and forth leg or foot movement of a user comprising

a pair of left and right foot pedals each having a horizontally oriented foot sole receiving surface,

the foot pedals being mounted and arranged on a frame for supporting the user standing thereon vertically upright and for movement in a back and forth direction along any one of a plurality of reproducible user selectable segments of an arcuate path between forwardmost upright horizontal and rearwardmost downward horizontal positions;

a pair of left and right handles for being grasped by a user's hands each pivotably interconnected to a respective one of the left and right foot pedals such the left handle pivots forwardly together with forward movement of the left pedal,

the left handle pivots backwardly together with backward movement of the left pedal, the right handle pivots forwardly together with forward movement of the right pedal and the right handle pivots backwardly together with backward movement of the right pedal.

IX. EVIDENCE APPENDIX

(None)

X. RELATED PROCEEDINGS APPENDIX

(None)